



The Effect of Mindfulness Therapy on Generalized Anxiety Disorder (GAD) Patients with Anxiety Disorders at Telaga Health Center

Rifki Arrohim Uno^{1*}, Rona Febriyona Mansur², Nur Uyuun I. Biahimo³

^{1,2,3}Prodi Keperawatan, Fakultas Ilmu Kesehatan, Universitas Muhammadiyah Gorontalo

*Email: rifkiuno333@gmail.com

Article Info

Article history:

Received 12 Feb, 2026

Revised 29 Mar, 2026

Accepted 20 Apr, 2026

Keywords:

GAD-7, Generalized Anxiety Disorder, Anxiety, Mindfulness Therapy

ABSTRACT

The high number of anxiety cases, especially Generalized Anxiety Disorder (GAD), in the Telaga Health Center's work area shows that anxiety is still a mental health problem that requires effective intervention in primary health services. One of the non-pharmacological efforts that can be applied is mindfulness therapy. This study aims to determine the effect of mindfulness therapy as an independent variable on the anxiety level of GAD patients as a dependent variable at the Telaga Health Center. This study uses a quasi-experiment design with a pretest-posttest control group design. A total of 30 respondents were selected using purposive sampling techniques and divided into intervention groups and control groups. The independent variable was in the form of the administration of mindfulness therapy, while the dependent variable was the anxiety level of GAD patients measured using the GAD-7 questionnaire. Data analysis was carried out by the Wilcoxon Signed Rank Test. The results showed that the administration of mindfulness therapy had a significant effect on reducing anxiety levels in the intervention group ($p < 0.05$), while the control group showed no significant change ($p > 0.05$). It was concluded that mindfulness therapy was shown to be effective in lowering the anxiety level of GAD patients. This intervention has the potential to be applied as a safe, simple, and applicable non-pharmacological alternative in primary health services, especially in health centers.

INTRODUCTION

Anxiety is understood as an individual's natural response when faced with a situation that is perceived as threatening. However, if the level of anxiety is not proportional to the threat or appears suddenly, this condition can interfere with daily activities. One form of anxiety that often occurs is *Generalized Anxiety Disorder* (GAD), which is a mental disorder characterized by excessive anxiety and worry that is difficult to control and lasts more than six months. Symptoms include fear, restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and sleep disturbances (WHO, 2023). Triggering factors for GAD can come from genetics, adverse childhood experiences, physical illnesses, substance abuse, and life stressors (Preti *et al.*, 2021). GAD can have a significant impact on an individual, including decreased work productivity, interpersonal relationship disruption, and will affect an increased risk of other psychiatric morbidities such as major depression, substance abuse, and suicidal ideation (Manullang and Susanti, 2022).

About 4.4% of the global population has an anxiety disorder (1). In 2021, there were 359 million individuals worldwide who suffered from anxiety disorders, making it the most common type of mental disorder (WHO, 2025). In Indonesia, based on the results of Basic Health Research (Riskesdas) in 2018, the prevalence of mental emotional disorders in the population over 15 years old is 9.8%, or the equivalent of 11 million people. Especially in Gorontalo Province, Gorontalo Regency has the highest prevalence, which is 26.42% of all cases of mental emotional disorders. This condition indicates that anxiety problems are serious mental health issues. (Abas, Boekoesoe and Tarigan, 2023)

In line with the data above, field findings at the Telaga Health Center strengthen this data. The results of the interview with one of the outpatients showed that there were complaints in the form of anxiety at night,

excessive concern for family safety, fear without a clear reason, and difficulty controlling anxiety, and also based on the results of interviews with the nurses of the mental health department at the Telaga Health Center, often some patients came and complained that the patient felt restless. This can certainly illustrate that anxiety is still a real problem that requires comprehensive treatment at the primary health service level.

A variety of methods can be used to treat GAD, both pharmacologically and psychologically. Cognitive behavioral therapy (CBT) has proven to be effective because it focuses on changing negative mindsets and maladaptive behaviors. Pharmacological therapies, such as *selective serotonin reuptake inhibitors* (SSRIs) and benzodiazepines, are also used although they are limited due to the risk of side effects. Other non-pharmacological alternatives that are widely developed are relaxation techniques, stress management, meditation, yoga, breathing exercises, and *Mindfulness therapy*.

Therapy *Mindfulness* is an approach that emphasizes full awareness of thoughts, feelings, and experiences in the present moment without judgment. This approach has been shown to be beneficial in reducing anxiety symptoms, improving emotional regulation, and improving quality of life. Thus, *Mindfulness* has the potential to be an effective non-pharmacological intervention in the treatment of patients with GAD, especially at the primary health service level such as health centers. (Putri *et al.*, 2024)

Although *Mindfulness* therapy has been shown to be effective in reducing anxiety levels in various international studies, its application in primary health services in Indonesia, especially in health centers, is still very limited. Most treatment (GAD) still focuses on pharmacological and (CBT) therapies that are not always available in basic service facilities. In addition, although Riskesdas data and the results of local surveys in Gorontalo show a high prevalence of mental emotional disorders, there has been no study that specifically tests the effectiveness of *Mindfulness* therapy for GAD patients at the Telaga Health Center, Gorontalo Regency. This condition creates a research gap that is important to study further.

RESEARCH METHODS

The research method used in this study is *pretest-posttest control group design* which aims to determine the effect of *Mindfulness therapy* on anxiety in patients with generalist anxiety disorder at the Telaga Health Center, so that from the results of the study different results were obtained between the experimental and control patient groups.

Research Location

The research was conducted at the TELAGA Health Center, Gorontalo district. This research was conducted from September to December 2025.

Population and Sample

The population in this study is all patients registered in the working area of the Telaga health center as many as **330 people**. The sample in this study is patients who are in the working area of the Telaga health center who meet the inclusion and exclusion criteria. The sampling technique used by the researcher in this study is purposive sampling. This method was chosen because the population is relatively large so it is not possible for researchers to make the entire population a research sample. The number of samples in this study was 77 patients after being calculated using the Slovin formula, but this number is still not possible for researchers to make 77 patients as samples due to time constraints in finding samples and the large number of samples that will be given *Mindfulness* therapy interventions. So that the researcher selected 30 patients with anxiety disorders in the work area of the Telaga Health Center based on the inclusion criteria that had been set by the researcher so that it is hoped that with a sample of 30 patients, the research will be completed on time.

Data types

Primary data can be obtained through observation, interviews, or filling out questionnaires. The original source of primary data includes informants or respondents related to the research variable. In this study, primary data was obtained from the results of the researcher's observation of patients using questionnaires. Questionnaire trials are carried out as a data collection technique to measure certain aspects answered by patients according to procedures or rules set by the researcher based on the available choices.

Secondary data in this study was obtained by researchers from various sources, including medical records of patients with a diagnosis of anxiety disorders at TELAGA Health Center, as well as epidemiological data from the Health and Basic Health Research Office (Riskesdas) of the Ministry of Health of the Republic of Indonesia. In addition, the researcher also used literature, previous research journals, and *Mindfulness therapy SOPs* that have been developed.

Data Analysis Techniques

Univariate Analysis

A univariate analysis was conducted to assess the distribution, frequency, and percentage related to the application of Mindfulness therapy as well as the level of anxiety in patients with anxiety disorders.

Bivariate Analysis

Bivariate analysis was performed to evaluate the relationship between *Mindfulness* therapy and anxiety levels in patients with anxiety disorders, using Pearson or Spearman correlation tests according to the data distribution, with a significance rate of 95% ($\alpha = 0.05$).

RESULTS

Respondent Characteristics

Table 1 Frequency distribution of respondent characteristics by age and sex

Respondent Characteristics	n	Presentation(%)
Age		
- 13-24	6	20%
- 25-64	24	80%
Total Amount	30	100%
Gender		
- Male	9	30%
- Women	21	70%
Total Amount	30	100%

Source: primary data (2025)

According to table 1 above of 30 respondents, the number of respondents in the age group of 13-24 is 6 respondents (20%) and 24 respondents (80%) are 25-64 years old, the male gender group is 9 respondents (30%), while the female gender is 21 respondents (70%).

Univariate Analysis

Table. 2 Distribution of respondents before therapy Mindfulness

Yes	Anxiety Level	Intervention		Controls	
		f	%	f	%
1	Normal	-	-	-	0%
2	Medium	-	-	9	60.0
3	Medium	9	60.0	5	33.3
4	Weight	6	40.0	1	6.7
Total Amount		15	100	15	100

Source: Primary Data (2025)

Based on table 2 above, it can be seen from the number of 30 respondents, before being given intervention, the number of respondents who did not experience a decrease in anxiety before being given *Mindfulness therapy* was 30 people (100%). It consisted of 9 people (60%) in the medium category, and 6 people (40%) in the heavy category in the intervention group, and in the control group there were 9 people (60%) in the light category, 5 people (33.3%) in the medium category, and 1 person (6.7%) in the heavy category.

Table 3 Distribution of respondents after therapy *Mindfulness*

Yes	Anxiety Level	Intervention		Controls	
		f	%	f	%
1	Normal	12	80.0	-	-
2	Lightweight	3	20.0	9	60.0
3	Medium	-	-	5	33.3
4	Weight	-	-	1	6.7
Total Amount		15	100	15	100

Source : Primary Data (2025)

Based on table 3, it can be seen that from the number of 30 respondents, the number of respondents who experienced a decrease in anxiety levels after being given *Mindfulness therapy* was 15 respondents (50%) in the intervention group with the category of 12 people (80%) in the Normal category, and 3 people (20%) in the mild category. and in the control group there was no decrease in anxiety levels as many as 15 respondents (50%) consisting of 9 people (60%) in the mild category, 5 people (33.3%) in the medium category, and 1 person (6.7%) in the weight category.

Bivariate Analysis

Wilcoxon Signed Rank Test

Table 4. Wilcoxon Test Results

Categories		sent(%)		Sum Of Ranks		p-value
Pre test	Post test	Pre test	Post test	Negative	Positive	
2	Post test < Pre test	0	100%	0	15	0.000
3	Post test = Pre test	0	0	0	0	0.000

Source : Primary data 2025

Changes in anxiety levels in respondents can be identified from changes in anxiety level scores experienced by respondents between *Pre-test* and *post-test*. So based on table 4, it is known that the test results *Wilcoxon* showed a significant effect of therapy *Mindfulness* with $p = 0.000$ ($p < 0.05$) on the decrease in the anxiety level of respondents in the working area of the Telaga health center, so that it can be interpreted that (H_a accepted and H_0 rejected). This is of course based on column data *Sum of Ranks* It showed that the number of negative data or those who experienced a decrease in anxiety was as many as 15 respondents included in the intervention group.

DISCUSSION

Results of Univariate analysis before being given Mindfulness Therapy

Prior to the implementation of mindfulness therapy, the respondent preparation stage was carried out as the initial part of the study to ensure that participants met the criteria that had been set and were willing to participate in the study voluntarily. Respondents who have passed the inclusion and exclusion criteria obtain an explanation of the purpose of the research, the expected benefits, the implementation flow, and the rights and obligations as participants, then express their consent through the signing of *an informed consent* sheet. Furthermore, the physical and psychological condition of the respondents was confirmed to be in a stable state, then the initial anxiety level (*pretest*) measurement was carried out using *the Generalized Anxiety Disorder (GAD-7)* instrument. Before the intervention was given, the respondents also received a brief briefing regarding the implementation of mindfulness therapy in accordance with the Standard Operating Procedures (SOP), as well as the researcher prepared a comfortable environment and supported the therapy process. The findings at the pretest stage showed that most of the respondents experienced a high enough level of anxiety that they needed intervention. Anxiety conditions prior to the administration of this therapy can be understood through the neurobiological approach of generalized anxiety disorders, which associate symptoms with the presence of disorders in the regulation of the autonomic nervous system as well as neurotransmitter imbalances, such as serotonin and GABA.

Based on the results of a univariate analysis of the respondents' anxiety levels before being given *Mindfulness* therapy, most of the respondents were in the category of moderate to severe anxiety. These findings show that the respondents involved in the study had a significant level of anxiety before the intervention was administered. This condition illustrates that anxiety disorders are real mental health problems and require proper handling, especially in respondents in the work area of the Telaga Health Center.

Respondents in this study were patients with Generalized Anxiety Disorder (*Generalized Anxiety Disorder/GAD*) which is in the adult age range and is dominated by the female gender. These findings are in line with the results of recent epidemiological research that states that anxiety disorders are more experienced by individuals of productive age due to high exposure to psychosocial stressors, such as job demands, economic problems, and family responsibilities (Correa and Brown, 2019) In addition, women are known to have a higher risk of developing anxiety disorders than men. (Narmandakh *et al.*, 2021) suggests that hormonal fluctuations, especially estrogen, contribute to increased susceptibility to anxiety in women. In addition to biological factors, psychosocial aspects such as dual roles and emotional sensitivity levels also increase the risk of anxiety. Thus, the characteristics of respondents in this study are consistent with the findings of recent research showing that demographic factors have an important contribution to the incidence of GAD.

The results of the identification of anxiety levels before the intervention also showed that the respondents experienced symptoms of anxiety that were persistent in nature and affected daily activities. Symptoms include feelings of excessive worry, tension, difficulty concentrating, and sleep disturbances, as reflected in the GAD-7 score. These findings are in line with theories that individuals with Generalized Anxiety Disorder (GAD) tend to experience persistent and uncontrollable anxiety, resulting in an impact on psychosocial functioning and quality of life. In the study Penninx *et al.*, (2021), GAD is described as a disorder with persistent excessive anxiety accompanied by impaired physical and psychological functioning. High levels of anxiety before the intervention suggest that patients do not have adequate adaptive coping mechanisms to manage anxiety.

The findings of this study are in accordance with the results of the study Astuti, *et al* (2022) who reported moderate to severe levels of anxiety in most patients before being given a therapeutic intervention *Mindfulness*. The study confirms that without proper psychological interventions, anxiety tends to persist and negatively impact patients' quality of life. High levels of anxiety before therapy *Mindfulness*, theoretically has the potential to be influenced by various factors, such as the demands of daily life, psychosocial stress, and the limitations of adaptive coping mechanisms in respondents. Individuals who do not have effective stress management strategies tend to be more prone to prolonged anxiety. This reinforces the importance of non-pharmacological interventions that focus on improving self-awareness and emotion regulation.

Univariate analysis results after being given mindfulness therapy

Based on the results of univariate analysis after the administration of therapy *Mindfulness*, there was a decrease in the anxiety level of respondents, where most of them moved from the category of moderate and severe anxiety to mild and normal. The results of this study show that there is a positive impact of therapy *Mindfulness* on the psychological condition of GAD patients. Effectiveness of interventions *Mindfulness* in reducing anxiety symptoms reported by (Goldberg, 2022) Especially through the mechanism of emotion regulation. *Mindfulness* helps individuals to be aware of anxious thoughts without judgment, thereby reducing the rumination tendencies that are a hallmark of GAD.

The findings of this study support the results of the study Yuliana, *et al* (2022) who reported a decrease in stress and anxiety levels after the application of the therapy *Mindfulness*. In addition, a study by Paradise, *et al* (2023) also shows that the therapy *Mindfulness* effective in improving the individual's ability to manage negative emotions, including anxiety, in both clinical and non-clinical populations.

In addition to the visible categorical decrease in anxiety levels, the results of this study show that Changes in anxiety patterns in respondents illustrate improvements in emotional regulation and psychological stress management, as reported in the study (Reangsing *et al.*, 2023) Conceptually, *Mindfulness* seeks to increase awareness of internal experiences including anxious thoughts and physiological responses to stress so that individuals can respond to situations without excessive reactivity. A comprehensive study shows that *Mindfulness*-based programs, both in-person and online, are consistently associated with a reduction in anxiety symptoms in the adult population, including those with high anxiety or chronic anxiety disorders. The results obtained in this study were similar to the findings of the meta-analysis which reported that *Mindfulness* interventions produced a statistically significant decrease in anxiety symptoms in adult groups, with effects that appear consistent despite the different types of interventions (face-to-face and online) This supports the interpretation that The observed changes in the respondents' anxiety levels were not a coincidence, rather than reflecting empirical effectiveness of *Mindfulness* in clinical and non-clinical contexts.

In addition, recent experimental research also found a significant reduction in anxiety symptoms after the application of *Mindfulness* through digital applications in the adult population with special needs, suggesting that The adaptive effects of *Mindfulness* can occur not only in a face-to-face live setting but also through a more flexible intervention format(Reangsing *et al.*, 2023). These findings support the results of the research at the Telaga Health Center, where respondents showed an adaptive psychological response to the given *Mindfulness* therapy sessions. Furthermore, univariate results showed that in addition to a decrease in general anxiety rates, respondents tended to show better ability in observing anxious thoughts without immediately reacting is a core skill taught through the practice of *Mindfulness*. This is in line with a mechanism often identified in literature reviews, namely that *Mindfulness* can improve metacognitive skills and reduce rumination tendencies, which is one of the factors that sustain chronic anxiety

Thus, the results of univariate analysis and identification of anxiety levels before and after the intervention showed that the respondents were in an initial condition that required therapeutic action. This condition becomes a strong basis in the application of *Mindfulness* therapy, in line with the theory of *Mindfulness* according to Jon Kabat-Zinn, which has been presented in Chapter II. where *Mindfulness* aims to increase awareness of current experiences without judgment, help individuals reduce emotional reactivity, as well as lower anxiety levels. Therefore, the picture of anxiety levels before and after intervention support the relevance and urgency of *Mindfulness* therapy in this study.

Results of bivariate analysis

Based on the results of bivariate analysis using *the Wilcoxon Signed Rank Test*, a significance value ($p < 0.05$) was obtained, indicating a significant difference in anxiety levels between before and after *Mindfulness* therapy. These results indicate that *Mindfulness therapy* is statistically effective in lowering respondents' anxiety levels. These findings reinforce the results of the previous univariate analysis which showed a decrease in anxiety scores after the intervention, so that the hypothesis H_a was accepted and H_0 was rejected, meaning that there is an effect of *Mindfulness therapy* on the reduction of anxiety in patients with generalist anxiety disorder at the Telaga health center is acceptable.

These findings indicate that *Mindfulness therapy* is able to provide statistically significant changes to the psychological condition of the respondents. A decrease in anxiety scores after the intervention showed that *Mindfulness* was effective in helping patients manage chronic and excessive anxiety, which is a key characteristic of GAD.

Clinically, a decrease in anxiety levels after being given *Mindfulness* therapy showed that respondents were able to manage anxiety that was previously persistent and difficult to control. This condition is in accordance with the characteristics of *Generalized Anxiety Disorder (GAD)* as described in Chapter II, namely excessive anxiety, persistent, and accompanied by psychological and somatic symptoms. After *the Mindfulness intervention*, respondents showed improvements in the ability to control anxious thoughts and emotional responses, which was reflected in a decrease in anxiety level categories.

Conceptually, *Mindfulness* helps individuals pay attention to internal experiences in the present moment with an attitude of acceptance. This approach helps patients to recognize anxious thoughts as temporary mental experiences, thereby reducing rumination tendencies and excessive worry (Goldberg, 2022) This mechanism plays an important role in lowering the activation of the sympathetic nervous system which is often increased in individuals with anxiety disorders.

According to Kabat-Zinn, the therapy *Mindfulness* helps individuals realize thoughts and feelings as a mental experience, not as a threat to be avoided. With this increased awareness, individuals can reduce the emotional reactivity and maladaptive mindset that are the basis for the emergence of anxiety in GAD patients. The results of this study are also in line with the research Yuliana, *et al* (2022) who found that the therapy *Mindfulness* significantly lowered anxiety levels after intervention in patients with psychological disorders. The study showed that the *Mindfulness* which is done in a structured manner contributes to increased emotion regulation. Similar results were also reported by Apriliyani and Dwidiyanti (2023) in both clinical and non-clinical populations. In the study, *Mindfulness* It has been shown to be effective in reducing anxiety symptoms through increased self-awareness and an individual's ability to accept emotional conditions without avoiding or suppressing them.

The role of *mindfulness* therapy in improving the ability to regulate emotions and control stress responses. *Mindfulness therapy* allows individuals to respond to stressors more adaptively, so that anxiety symptoms such as restlessness, tension, and excessive worry can be reduced. Therefore, the results of the bivariate analysis of this study provide support for the theoretical foundation regarding the role of *Mindfulness* therapy in reducing anxiety levels.

The results of this study are also supported by research Fitria, *et al* (2025) which mentions that the application of therapy *Mindfulness* In primary health services, such as health centers, it has a positive impact on reducing patient anxiety. The study confirms that *Mindfulness* is a non-pharmacological intervention that is easy to implement, safe, and can be performed by nursing personnel after a short training.

Clinically, the results of bivariate analysis in this study show that *Mindfulness* therapy not only provides statistically significant changes, but also is practically meaningful. A decrease in anxiety levels after the intervention showed an improvement in patients' ability to manage stress and anxiety, which had a positive impact on social functioning and quality of life.

Thus, the results of the bivariate analysis in this study strengthen the scientific evidence that *Mindfulness* therapy is an effective intervention in reducing anxiety levels in patients with GAD. These findings support the application of *Mindfulness therapy* as part of non-pharmacological psychiatric nursing interventions in primary health services, particularly at Telaga Health Centers.

CONCLUSION

The anxiety level of patients with General Anxiety Disorder (GAD) at the Telaga Health Center before being given *Mindfulness* therapy was in the category of moderate to severe anxiety. This suggests that GAD patients still experience significant anxiety and require appropriate nursing interventions, both pharmacologically and non-pharmacologically.

Mindfulness Therapy has the potential as a non-pharmacological method that can be applied in primary health services, especially in health centers. This therapy is easy to do, safe, does not require special tools, and can be carried out by health workers after being given simple training, so that it is in accordance with the conditions of first-level health services.

There is an effect of *Mindfulness therapy* on reducing the level of anxiety of patients with General Anxiety Disorder (GAD) at the Telaga Health Center. The results of the analysis showed a significant difference in anxiety levels between before and after *Mindfulness therapy*, which was characterized by a decrease in anxiety scores based on the GAD-7 instrument

Suggestions

Researchers are then advised to use a larger sample number so that the results can be generalized more broadly. In addition, the use of research designs with control groups needs to be considered so that the effects of *Mindfulness* therapy can be compared more clearly between intervention and non-intervention groups. Researchers are also encouraged to follow up a few weeks or months after the intervention to see if the impact of *mindfulness* can last in the long term. In future research, additional variables such as stress levels, depression, or sleep quality can be studied to provide a more comprehensive picture of the benefits of *mindfulness*. It is also important to have stricter supervision of the implementation of the exercise, for example through exercise journals or supporting applications, so that respondents' compliance can be better monitored

Respondents are expected to continue *practicing Mindfulness* independently after the study ends, because regular practice can provide more optimal benefits in reducing anxiety. People who experience mild to moderate stress or anxiety can also make *Mindfulness* an easy method of managing emotions and can be done at any time. In addition, it is important for people to recognize signs of anxiety early so that they can take preventive measures, such as breathing exercises, relaxation, or seeking help from health professionals if anxiety symptoms are increasing.

Health workers are advised to consider *Mindfulness* therapy as one of the non-pharmacological interventions in treating anxiety problems in patients. In addition to providing health education, health workers can teach simple *Mindfulness* techniques that patients can do at home independently. Puskesmas are also expected to develop routine programs such as relaxation classes, *Mindfulness* classes, or psychological support groups to help people overcome anxiety and improve mental well-being

Educational institutions are advised to start introducing and integrating the concept of *Mindfulness* into student learning, especially for those who will be working in the health field. *Mindfulness* training can help students manage academic stress and become a provision of skills in providing psychosocial interventions to patients. In addition, the campus can also provide *regular Mindfulness* training or workshops as an effort to support the mental health of the academic community.

REFERENCES

- Abas, J., Boekoesoe, L. and Tarigan, S.F.N. (2023) 'Analysis of Determinants of Adolescent Emotional Mental Health Disorders at SMA Negeri 1 Limboto', *Health Information : Research Journal*, 15(2), p. e1302.
- Akbar, R.R. et al. (2022) 'Public Education About Anxious Symptoms', *Dinamisia: Journal of Community Service*, 6(4), pp. 876–881. Available at: <https://doi.org/10.31849/dinamisia.v6i4.10008>.
- Astuti, V., Fitriyanti, D. and Yono, N.H. (2022) 'The Effectiveness of Mindfulness Therapy on the Anxiety Level of Patients Undergoing Hemodialysis', *Karya Kesehatan Siwalima*, 1(2), pp. 86–93. Available at: <https://doi.org/10.54639/kks.v1i2.834>.
- Bobby, J. et al. (2020) 'Research on the Anxiety of the Cilacap Community in Facing the Covid-19 Pandemic'. Cilacap, Indonesia: Nahdlatul Ulama Al Ghazali University (UNUGHA) Cilacap, LP2M. Available at: https://www.academia.edu/43078503/Riset_Kecemasan_Masyarakat_Cilacap_Menghadapi_Pandemi_Covid_19_1_.
- Correa, J.K. and Brown, T.A. (2019) 'Expression of Generalized Anxiety Disorder Across the Lifespan', *Journal of Psychopathology and Behavioral Assessment*, 41(1), pp. 53–59. Available at: <https://doi.org/10.1007/s10862-018-9697-z>.
- Dr. dr. Alifiati Fitrikasari, S.K. (2021) *TEXTBOOK of Neurotic Disorders, Somatoform Disorders and Stress-Related Disorders*.
- Fadhilah, G.Z.N., Saputra, R.A. and Wibowo, A.H. (2024) 'Detection of Anxiety Disorder Level Using Random Forest Method', *JT: Journal of Engineering*, 13(01), pp. 38–47. Available at: <http://jurnal.umt.ac.id/index.php/jt/index>.

- Fadilah, R.N. and Priambodo, A. (2024) 'Stress and anxiety in competitive sports', *Journal of History Education and Social Research in the Humanities*, 4(1), p. 27.
- Firdaus, A. and A. (2023) (2023) 'On mental health conditions in adolescent individuals. The method used is a literature review that is carried out systematically with a review of 7 national and international research articles carried out', 5, pp. 742–751.
- Firdaus, A.M., Sawitri, D.R. and Dwidiyanti, M. (2023) 'Mindfulness Therapy for Adolescent Mental Health', *Journal of Telenursing (JOTING)*, 5(1), pp. 742–751. Available at: <https://doi.org/10.31539/joting.v5i1.5498>.
- Firmansyah, D. and Dede (2022) 'General Sampling Techniques in Research Methodology: Literature Review', *Scientific Journal of Holistic Education (JIPH)*, 1(2), pp. 85–114. Available at: <https://doi.org/10.55927/jiph.v1i2.937>.
- Fitria, Z., Fitriani, R. and Irham, M. (2025) 'THE EFFECT OF MINDFULNESS ON ANXIETY LEVELS IN PREGNANT WOMEN IN THE THIRD TRIMESTER', 9(36), pp. 6413–6417.
- Galuh, M. and Faqih, H. (2025) 'ADOLESCENTS THROUGH INTERACTIVE APPROACHES AND ROLEPLAY COPING STRATEGIES AT SMA BATIK 1 SURAKARTA', 6(2), pp. 1071–1076.
- Goldberg, S.B. (2022) 'A common factors perspective on mindfulness-based interventions', *Nature Reviews Psychology*, 1(10), pp. 605–619. Available at: <https://doi.org/10.1038/s44159-022-00090-8>.
- Handayani, L.T. (2018) 'A Study of Research Ethics in the Health Sector by Involving Humans as Subjects', *The Indonesian Journal of Health Science*, 10(1), pp. 47–54. Available at: <https://doi.org/10.32528/the.v10i1.1454>.
- Hikmah, J. (2020) 'Paradigm', *Computer Graphics Forum*, 39(1), pp. 672–673. Available at: <https://doi.org/10.1111/cgf.13898>.
- Health, J.I. and Member, S.S. (2022) 'Olives EFFECT OF YOGA GYMNASICS THERAPY ON ANXIETY LEVELS IN THE INTRODUCTION Adults are people who are no longer children and have become full men and women After experiencing a long childhood and adolescence. (Herawati & Hidayat, 2020', x(x).
- Kusuma, M.A.A. and Izzah, N. (2022) 'Overview of Mental Health (Anxiety and Depression) in the Community During the COVID-19 Pandemic: Literature Review', *Proceedings of the National Seminar on Health*, 1, pp. 2293–2301. Available at: <https://doi.org/10.48144/prosiding.v1i.1064>.
- Manullang, L.M. and Susanti, R. (2022) 'Nusantara Hasana Journal', *Nusantara Hasana Journal*, 2(2), pp. 2–7. Available at: <http://nusantarahasanajournal.com/index.php/nhj/article/download/392/258>.
- Narmandakh, A. et al. (2021) 'Psychosocial and biological risk factors of anxiety disorders in adolescents: a TRAILS report', *European Child & Adolescent Psychiatry*, 30(12), pp. 1969–1982. Available at: <https://doi.org/10.1007/s00787-020-01669-3>.
- Penninx, B.W.J.H. et al. (2021) 'Anxiety disorders', *Lancet*, 397(10277), pp. 914–927. Available at: [https://doi.org/10.1016/S0140-6736\(21\)00359-7](https://doi.org/10.1016/S0140-6736(21)00359-7).
- Preti, A. et al. (2021) 'The lifetime prevalence and impact of generalized anxiety disorders in an epidemiologic Italian National Survey carried out by clinicians by means of semi-structured interviews', *BMC Psychiatry*, 21(1), pp. 4–11. Available at: <https://doi.org/10.1186/s12888-021-03042-3>.
- Putri, H.A. et al. (2024) 'The Application of Mindfulness Techniques in the Learning Process in Senior High Schools', *Journal of Good Practices of School and Islamic Boarding School Learning*, 3(03), pp. 152–162. Available at: <https://doi.org/10.56741/pbpsp.v3i03.733>.
- Reangsing, C. et al. (2023) 'Effects of online mindfulness-based interventions (MBIs) on anxiety symptoms in adults : a systematic review and meta- analysis', 9, pp. 1–11.
- Study, P. et al. (2004) 'ANXIETY OF THE MAIN CHARACTER IN THE FILM BUBA: PSYCHOANALYSIS OF SIGMUND FREUD Zella Febi Novita Sari Wisma Kurniawati Abstract'.
- Suriani, N., Risnita and Jailani, M.S. (2023) 'The Concept of Population and Sampling and Participant Selection Reviewed from Educational Scientific Research', *IHSAN Journal: Journal of Islamic Education*, 1(2), pp. 24–36. Available at: <https://doi.org/10.61104/ihsan.v1i2.55>.
- Sutanto, S.H. and Immanuela, G. (2022) 'Understanding mindfulness for high school students', *Journal of Devotion Psychology Service*, 1(1), pp. 12–20.
- WHO (2025) 'Anxiety disorders'. Available at: <https://www.who.int/news-room/fact-sheets/detail/anxiety-disorders>.
- Yaldi, E. et al. (2022) 'The Application of Multicollinearity Test in Human Resource Management Research', *Scientific Journal of Management and Entrepreneurship (JUMANAGE)*, 1(2), pp. 94–102. Available at: <https://doi.org/10.33998/jumanage.2022.1.2.89>.